

September 1, 2016

Bank for International Settlements (BIS) Triennial Central Bank Survey of foreign exchange and derivatives market activity in April 2016

I. General aspects

Banco de México participated in the eleventh Triennial Central Bank survey of foreign exchange and derivatives market activity in 2016 undertaken by the Bank for International Settlements (BIS). As in previous occasions, the objective of this survey is to obtain consistent and exhaustive information on the size, structure, and activity in the aforementioned markets at a global scale. This year 52 central banks and monetary authorities took part in the survey and collected data from approximately 1,300 banks and other dealers in their respective jurisdictions.

Amongst the results from the survey, the following stand out:

- ***The Mexican peso ranked as the tenth most traded currency in the world, exceeding the traded volume of some developed market currencies and resulting as the second most traded currency amongst those of developing countries, surpassed only by the Chinese renminbi.***
- ***Global trading volume on the Mexican peso¹ diminished when compared to the survey conducted in April 2013, totaling a daily average turnover of approximately 112 billion dollars, of which almost 20 billion dollars² are traded in Mexico.***
- ***Once again, the information gathered in the survey shows that a large part of the Mexican peso trading volume takes place outside of Mexico, with the US dollar as the main currency against which it trades.***

¹ Peso transactions against the US dollar and other currencies in the spot, forward, swap, and option markets.

² Amount not adjusted for local and cross-border inter-dealer double-counting (i.e. "gross-gross" basis).



Press release

As is the case every three years, Banco de México collaborates with the BIS in gathering consistent and comparable information on foreign exchange market transactions around the world. This Triennial Survey is the most exhaustive source on the size and structure of the global foreign exchange and OTC derivatives markets. Hence, the results obtained from these surveys have permitted policymakers, financial authorities, and other market participants to monitor the evolution of the market, identify its main characteristics, and understand the particular weight that each currency and instrument holds in worldwide daily operations.

This year's survey shows that the Mexican peso's operating volume has diminished when compared to the previous survey, ranking tenth among the world's most traded currencies. It should be emphasized that it receded one place amongst emerging market currencies and placed second after the Chinese renminbi, which is now ranked first amid these economies. Still, it is worth mentioning that the Chinese renminbi's participation in foreign exchange markets practically doubled from the previous survey. In aggregate, the peso's daily turnover fell from close to 135 billion dollars in 2013 to around 112 billion in 2016. Furthermore, it is worth noting that transactions involving the Mexican peso take place globally and 24 hours a day, which is consistent with the survey showing that 82% of the daily average volume traded involves financial institutions outside of Mexico, compared with 77% reported in 2013 and 67% disclosed in 2010.

The fall in traded volume is not exclusive to the Mexican peso and, in general terms, is consistent with what was observed in most global foreign exchange markets. This seems to respond to a diminished willingness and capacity from financial intermediaries to interact in these markets in light of new regulation and due to the efforts of these participants to internalize operations.

The results from this survey validate the effort and measures undertaken by Mexican authorities in the past years in order to develop the foreign exchange market by offering a transparent, reliable, and consistent regulatory framework and trading conditions in line with international standards. Consequently, it is of the utmost importance to have credibility on the implementation of economic and foreign exchange policies as they constitute a fundamental pillar in fostering the Mexican peso foreign exchange market.

As mentioned above, the Mexican peso is among the ten most traded currencies globally and ranks ahead of some currencies that are often noted for operating under high liquidity conditions in most of the world's major financial hubs such as the Norwegian krone, the New Zealand dollar, the Singapore dollar, and the Hong Kong dollar (Table 1).

Table 1: Currency distribution of global foreign exchange market turnover

Global position	Percentage share of average daily turnover in April							
	2007		2010		2013		2016	
	Currency	Participation	Currency	Participation	Currency	Participation	Currency	Participation
1	U.S. dollar	85.6	U.S. dollar	84.9	U.S. dollar	87.0	U.S. dollar	87.6
2	Euro	37.0	Euro	39.1	Euro	33.6	Euro	31.3
3	Japanese yen	17.2	Japanese yen	19.0	Japanese yen	23.2	Japanese yen	21.6
4	Sterling pound	14.9	Sterling pound	12.9	Pound sterling	11.9	Pound sterling	12.8
5	Swiss franc	6.8	Australian dollar	7.6	Australian dollar	8.7	Australian dollar	6.9
6	Australian dollar	6.6	Swiss franc	6.3	Swiss franc	5.2	Canadian dollar	5.1
7	Canadian dollar	4.3	Canadian dollar	5.3	Canadian dollar	4.6	Swiss franc	4.8
8	Hong Kong dollar	2.7	Hong Kong dollar	2.4	Mexican peso	2.6	Chinese renminbi	4.0
9	Swedish krona	2.7	Swedish krona	2.2	New Zealand dollar	2.0	Swedish krona	2.2
10	Norwegian krone	2.1	New Zealand dollar	1.6	Swedish krona	1.8	Mexican peso	2.2
11	New Zealand dollar	1.9	Korean won	1.5	Chinese renminbi	1.6	New Zealand dollar	2.1
12	Mexican peso	1.3	Singapore dollar	1.4	Russian ruble	1.6	Singapore dollar	1.8
13	Singapore dollar	1.2	Norwegian krone	1.3	Norwegian krone	1.4	Hong Kong dollar	1.7
14	Korean won	1.2	Mexican peso	1.3	Hong Kong dollar	1.4	Norwegian krone	1.7
15	South African rand	0.9	Indian rupee	1.0	Singapore dollar	1.4	Korean won	1.6

Source: Bank for International Settlements

Note: As there are two currencies involved in each transaction, the sum of the total participation percentage equals 200% instead of 100%.

In terms of Mexico's relevance as a financial center, the geographic distribution of daily operations show that 0.3% of total foreign exchange market turnover takes place in our country. Even though this proportion is slightly lower than that of three years ago, it is worth noting that it has remained relatively stable during the last eight surveys (Table 2).

Table 2: Geographical distribution of global foreign exchange market turnover

Billions of U.S. dollars , percentage

Country	1995		1998		2001		2004		2007		2010		2013		2016	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Argentina	...	...	2	0.1	...	...	1	0.0	1	0.0	2	0.0	1	0.0	1	0.0
Australia	41	2.5	48	2.3	54	3.2	107	4.1	176	4.1	192	3.8	182	2.7	135	2.1
Austria	13	0.8	12	0.6	8	0.5	15	0.6	19	0.4	20	0.4	15	0.2	19	0.3
Bahrain	3	0.2	3	0.1	3	0.2	3	0.1	3	0.1	5	0.1	9	0.1	6	0.1
Belgium	29	1.8	27	1.3	10	0.6	21	0.8	50	1.2	33	0.7	22	0.3	23	0.4
Brazil	...	...	5	0.2	6	0.4	4	0.2	6	0.1	14	0.3	17	0.3	20	0.3
Bulgaria	...	...	...	...	...	...	...	...	1	0.0	1	0.0	2	0.0	2	0.0
Canada	31	1.9	38	1.8	44	2.6	59	2.3	64	1.5	62	1.2	65	1.0	86	1.3
Chile	...	...	1	0.0	2	0.1	2	0.1	4	0.1	6	0.1	12	0.2	7	0.1
China	...	...	0	0.0	...	...	1	0.0	9	0.2	20	0.4	44	0.7	73	1.1
Chinese Taipei	...	...	5	0.2	5	0.3	9	0.3	16	0.4	18	0.4	26	0.4	27	0.4
Colombia	...	...	...	...	0	0.0	1	0.0	2	0.0	3	0.1	3	0.0	4	0.1
Czech Republic	...	...	5	0.2	2	0.1	2	0.1	5	0.1	5	0.1	5	0.1	4	0.1
Denmark	32	2.0	28	1.3	24	1.4	42	1.6	88	2.1	120	2.4	117	1.8	101	1.5
Estonia	...	...	...	...	...	...	0	0.0	1	0.0	1	0.0	0	0.0	...	...
Finland	5	0.3	4	0.2	2	0.1	2	0.1	8	0.2	31	0.6	15	0.2	14	0.2
France	62	3.8	77	3.7	50	2.9	67	2.6	127	3.0	152	3.0	190	2.8	181	2.8
Germany	79	4.8	100	4.8	91	5.3	120	4.6	101	2.4	109	2.2	111	1.7	116	1.8
Greece	3	0.2	7	0.3	5	0.3	4	0.2	5	0.1	5	0.1	3	0.0	1	0.0
Hong Kong	91	5.6	80	3.8	68	4.0	106	4.1	181	4.2	238	4.7	275	4.1	437	6.7
Hungary	...	...	1	0.0	1	0.1	3	0.1	7	0.2	4	0.1	4	0.1	3	0.0
India	...	...	2	0.1	3	0.2	7	0.3	38	0.9	27	0.5	31	0.5	34	0.5
Indonesia	...	...	2	0.1	4	0.2	2	0.1	3	0.1	3	0.1	5	0.1	5	0.1
Ireland	5	0.3	11	0.5	9	0.5	7	0.3	11	0.3	15	0.3	11	0.2	2	0.0
Israel	...	...	...	...	1	0.1	5	0.2	8	0.2	10	0.2	8	0.1	8	0.1
Italy	24	1.5	29	1.4	18	1.1	23	0.9	38	0.9	29	0.6	24	0.4	18	0.3
Japan	168	10.3	146	7.0	153	9.0	207	7.9	250	5.8	312	6.2	374	5.6	399	6.1
Latvia	...	...	...	...	...	...	2	0.1	3	0.1	2	0.0	2	0.0	1	0.0
Lithuania	...	...	...	...	...	...	1	0.0	1	0.0	1	0.0	1	0.0	0	0.0
Luxembourg	19	1.2	23	1.1	13	0.8	15	0.6	44	1.0	33	0.7	51	0.8	37	0.6
Malaysia	...	...	1	0.0	1	0.1	2	0.1	3	0.1	7	0.1	11	0.2	8	0.1
Mexico	...	...	9	0.4	9	0.5	15	0.6	15	0.4	17	0.3	32	0.5	20	0.3
Netherlands	27	1.7	43	2.0	31	1.8	52	2.0	25	0.6	18	0.4	112	1.7	85	1.3
New Zealand	7	0.4	7	0.3	4	0.2	7	0.3	13	0.3	9	0.2	12	0.2	10	0.2
Norway	8	0.5	9	0.4	13	0.8	14	0.5	32	0.7	22	0.4	21	0.3	40	0.6
Peru	...	...	...	...	0	0.0	0	0.0	1	0.0	1	0.0	2	0.0	1	0.0
Philippines	...	...	1	0.0	1	0.1	1	0.0	2	0.0	5	0.1	4	0.1	3	0.0
Poland	...	...	3	0.1	5	0.3	7	0.3	9	0.2	8	0.2	8	0.1	9	0.1
Portugal	2	0.1	4	0.2	2	0.1	2	0.1	4	0.1	4	0.1	4	0.1	2	0.0
Romania	...	...	...	...	...	...	...	...	3	0.1	3	0.1	3	0.0	3	0.0
Russia	...	...	7	0.3	10	0.6	30	1.2	50	1.2	42	0.8	61	0.9	45	0.7
Saudi Arabia	...	...	2	0.1	2	0.1	2	0.1	4	0.1	5	0.1	5	0.1	5	0.1
Singapore	107	6.6	145	6.9	104	6.1	134	5.1	242	5.7	266	5.3	383	5.7	517	7.9
Slovakia	...	...	...	...	1	0.1	2	0.1	3	0.1	0	0.0	1	0.0	2	0.0
Slovenia	...	...	...	...	0	0.0	0	0.0	0	0.0	...	...	...	...	...	...
South Africa	5	0.3	9	0.4	10	0.6	10	0.4	14	0.3	14	0.3	21	0.3	21	0.3
South Korea	...	...	4	0.2	10	0.6	21	0.8	35	0.8	44	0.9	48	0.7	48	0.7
Spain	18	1.1	20	1.0	8	0.5	14	0.5	17	0.4	29	0.6	43	0.6	33	0.5
Sweden	20	1.2	16	0.8	25	1.5	32	1.2	44	1.0	45	0.9	44	0.7	42	0.6
Switzerland	88	5.4	92	4.4	76	4.5	85	3.3	254	5.9	249	4.9	216	3.2	156	2.4
Thailand	...	...	3	0.1	2	0.1	3	0.1	6	0.1	7	0.1	13	0.2	11	0.2
Turkey	...	...	...	...	1	0.1	3	0.1	4	0.1	17	0.3	27	0.4	22	0.3
United Kingdom	479	29.3	685	32.6	542	31.8	835	32.0	1,483	34.6	1,854	36.8	2,726	40.8	2,426	37.1
United States	266	16.3	383	18.2	273	16.0	499	19.1	745	17.4	904	17.9	1,263	18.9	1,272	19.4
Total	1,633	100	2,099	100	1,705	100	2,608	100	4,281	100	5,043	100	6,684	100	6,546	100

Source: Bank for International Settlements

Note: Daily average during April, amount adjusted for local inter-dealer double-counting (i.e. "net-gross" basis)

The tables below contain data collected by Banco de México from the local foreign exchange and interest rate derivatives markets, which was provided to the BIS as part of the global survey. The amounts shown represent daily averages expressed in millions of US dollars and the methodology used is available in the following link: <http://www.bis.org/publ/rpfx16.htm>.

II. Relevant elements of local trading volume

In order to gather information for the global survey, seventeen financial institutions in Mexico contributed in the compilation of the data. These institutions have the highest participation in the domestic foreign exchange market and together represent 96% of local activity. The survey shows that in April 2016 daily turnover for Mexican peso transactions were slightly above 20 billion dollars, a 34% decrease from 2013. This decline was driven by a fall in all instruments, particularly in FX swaps, which fell 43% from the previous survey (Tables 3 and 4).

Table 3. Spot, Forwards, and Swaps. Mexican peso against other currencies

Instruments	Foreign exchange contract ¹							TOT
	Average daily turnover (April 2016)							
	US dollar (millions)							
	MXN against							
	USD	EUR	JPY	GBP	CHF	CAD	Other	
SPOT ²	5,815	183	8	6	5	22	0	6,040
FORWARDS ³	1,228	17	19	0	0	0	0	1,264
SWAPS ⁴	12,481	195	1	35	8	9	4	12,733

¹ All OTC transactions involving exposure in more than one currency in exchange rate or interest rate operations.

² Simple spot settlement transactions. Includes same day and 24-hour transactions. Excludes "tomorrow/next day" transactions and settlements after 48 hours

³ Simple transactions for settlement after 48 hours.

⁴ Operations involving both a buy and sell transaction. Each part of the swap is not considered as a separate independent trade. Includes "tomorrow/next day" transactions.

Note: Amount not adjusted for local and cross-border inter-dealer double-counting (i.e. "gross-gross" basis). The abbreviations are defined as follows:

MXN=Mexican peso, USD=US dollar, EUR=Euro, JPY=Japanese yen, GBP=Pound sterling and CHF=Swiss franc.

Table 4: Spot, Forwards and Swaps. US dollar against currencies other than the Mexican peso.

Instrument	Foreign exchange contracts ¹						TOT
	Average daily turnover (April 2016)						
	US dollar (millions)						
	USD against currencies different than MXN						
	EUR	JPY	GBP	CHF	OTHER		
SPOT ²	310	159	56	7	117		649
FORWARDS ³	195	16	0	0	95		307
SWAPS ⁴	82	1	18	1	3		104

¹ All OTC transactions involving exposure in more than one currency in exchange rate or interest rate operations.

² Simple spot settlement transactions. Includes same day and 24-hour transactions. Excludes "tomorrow/next day" transactions and settlements after 48 hours

³ Simple transactions for settlement after 48 hours.

⁴ Operations involving both a buy and sell transaction. Each part of the swap is not considered as a separate independent trade. Includes "tomorrow/next day" transactions.

Note: Amount not adjusted for local and cross-border inter-dealer double-counting (i.e. "gross-gross" basis). The abbreviations are defined as follows: MXN=Mexican peso, USD=US dollar, EUR=Euro,

As seen in previous surveys, 97% of total foreign exchange transactions that involved the Mexican peso were traded against the US dollar, followed by the Euro which represented 2% of total trades.

Regarding term structure, the results of this year's survey are similar to those observed in prior occasions. In sum, 91% of swaps have a maturity of seven days or less, while 96% of forward transactions have maturities between seven days and up to one year³.

On the other hand, foreign exchange transactions involving options and other derivatives, although still representing a small proportion of total operations, have increased from 2013 (Tables 5 and 6).

Table 5. Cross Currency Swaps and OTC Options. Mexican peso against other currencies.

Foreign exchange contracts ¹
Daily Average Volume (April 2016)
US dollar (millions)

Instruments	MXN against other currencies		
	USD	Other	Total
Cross currency swaps ²	56	18	74
OTC Options Sold³	236	31	266
OTC Options Bought ³	118	35	153

¹ All OTC transactions involving exposure in more than one currency in exchange rate or interest rate operations.

² Cross currency swaps are agreements between two parties to exchange interest payments and principal on loans denominated in two different currencies. Each part of the swap is not considered as a separate independent trade.

³ OTC options are agreements that offer the buyer the right, but not the obligation, to buy or sell a currency at a determined exchange rate and term. It can include currency warrants and multicurrency swaptions.

Note: Amount not adjusted for local and cross-border inter-dealer double-counting (i.e. "gross-gross" basis). The abbreviations are defined as follows: MXN=Mexican peso, USD=US dollar, EUR=Euro, JPY=Japanese yen, GBP=Pound sterling and CHF=Swiss franc.

Table 6: Cross Currency Swaps and OTC Options. U.S. dollar against other currencies.

Foreign exchange contracts ¹
Daily Average Volume (April 2016)
US dollar (millions)

Instruments	USD against currencies different than MXN				
	EUR	GBP	JPY	Other	Total
Cross currency swaps²	53	0	0	0	53
OTC Options Sold³	49	20	44	5	119
OTC Options Bought ³	49	20	45	6	120

¹ All OTC transactions involving exposure in more than one currency in exchange rate or interest rate operations.

² Cross currency swaps are agreements between two parties to exchange interest payments and principal on loans denominated in two different currencies. Each part of the swap is not considered as a separate independent trade.

³ OTC options are agreements that offer the buyer the right, but not the obligation, to buy or sell a currency at a determined exchange rate and term. It can include currency warrants and multicurrency swaptions.

Note: Amount not adjusted for local and cross-border inter-dealer double-counting (i.e. "gross-gross" basis). The abbreviations are defined as follows: MXN=Mexican peso, USD=US dollar, EUR=Euro, JPY=Japanese yen, GBP=Pound sterling and CHF=Swiss franc.

³ In 2013, 95% of foreign exchange swaps expired in less than seven days and 72% of forwards expired between seven days and one year.

Transactions where at least one counterparty was a local resident accounted for 18% with respect to global volume, a decrease from the 23% reached in 2013 and consistent with the evolution observed in other FX surveys that involve the Mexican peso.

Finally, regarding operations on single currency interest rate derivatives, interest rate swaps continue to represent the largest share of daily turnover with operations amounting to around 1.4 billion dollars, a decline of 36% from the 2013 survey (Table 7).

Table 7: OTC Options and Interest Rate Swaps. Single currency

Single currency interest rate derivatives ¹				
Average daily volume (April 2016)				
US dollar (millions)				
Instruments	MXN	USD	Other	TOTAL
OTC options sold ²	47	8	0	55
OTC options bought²	5	7	0	12
Interest rate swaps³	1,046	379	8	1,433

¹ All OTC transaction involving exposure to interest rate denominated in a single currency. Includes "fixed for floating rate" and "floating for floating rate" agreements.

² OTC options are agreements that offer the buyer the right, but not the obligation, to pay or receive an interest rate on a determined notional amount at a determined time.

³ Agreement that commits the counterparties to exchange interest rate flows; it may be fixed or floating. Each part of the swap is not considered a separate independent trade.

Note: Amount not adjusted for local and cross-border inter-dealer double-counting (i.e. "gross-gross" basis). Abbreviations are defined as follows: MXN= Mexican peso and USD= American dollar.